

WHAT IS CLAIMED IS:

- 50372
1. A system for providing a digital television data broadcast service, comprising:
    - a) a data service authoring subsystem operable to provide key clip data in a defined format identifying key clips of an audiovisual program;
    - b) a data service encoder operable to receive said key clip data and program and system information data and finalize contents of said data broadcast service
    - c) a multiplexer operable to multiplex said contents of said data broadcast service with encoded audiovisual programs and produce a data transport stream.
  2. The system as claimed in claim 1, wherein said key clips are referenced using system time.
  3. The system as claimed in claim 1, wherein said key clips are referenced using Local Time which can be reconstructed in the receiver from transmitted Program Clock References (PCR) and Local Time References pair.
  4. The system as claimed in claim 3, wherein said system includes a video reference generator.
  5. The system as claimed in claim 1, wherein said key clips are referenced using starting and ending flags transmitted in synchronization with an element of said audiovisual program.
  6. The system as claimed in claim 1, wherein said defined format identifying key clips of an audiovisual program further comprises starting and ending references for said key clips.

7. The system as claimed in claim 1, wherein said defined format identifying key clips of an audiovisual program further comprises an identification of the content of the key clip, wherein said content includes events and objects associated with said key clip.

5 8. A receiver operable to receive and operate upon a digital television data broadcast service, comprising:

- 10 a) a filter module operable to produce program-related information from said digital television broadcast service, wherein said program-related information includes portions of audiovisual programs;
- b) a navigation module operable to allow a user to browse said program-related information;
- c) a summarizer operable to create summaries of said audiovisual programs.

15 9. The receiver as claimed in claim 8, wherein said filter module is operable to produce program-related information for within-program filtering of audiovisual programs.

10. The receiver as claimed in claim 8, wherein said program-related information further comprises information for database indexing for archival of said audiovisual programs.

20 11. The receiver as claimed in claim 8, wherein said receiver further comprises a register of user preferences, wherein said filter module and said summarizer use said user preferences in generating said program-related information and said summaries.

12. A program summarizer operable to receive a data broadcast service for filtering and generating summaries of audiovisual programs, comprising:

- a) a description extraction module operable to parse and extract an audiovisual program description provided by said data broadcast service;
- 5 b) a program and system information extraction module operable to extract the program and system information protocol (PSIP) information and MPEG-2 System Information from said data broadcast service;
- c) an inference engine operable to combine said audiovisual program description with said PSIP information and any other available program information producing program-related information;
- 10 d) a program map table operable to take said program-related information and produce a map of video references and times;
- e) a key clip extraction table operable to extract key clips from said audiovisual program; and
- 15 f) a summary module operable to produce summaries of said audiovisual program and provide it to a viewer.

13. The summarizer of claim 12, wherein said any other available program information further comprises user preferences.

14. The summarizer of claim 12, wherein said any other available program information further comprises information downloaded from a web site.

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